

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application.

Listing of Claims:

1. (Currently amended) A method of increasing insulin sensitivity in a human or non-human subject, the method comprising the steps of:
administering an agent for reducing stearoyl-CoA desaturase 1 (SCD1) activity in the human or non-human subject sufficiently to increase insulin sensitivity; and
measuring insulin sensitivity and observing an increase in insulin sensitivity
following a reduction in SCD1 activity.
2. (Currently amended) The method of claim 1, wherein the agent reduces reducing SCD1 activity is accomplished by reducing SCD1 protein level.
3. (Currently amended) The method of claim 2, wherein the agent reduces SCD1 protein level reducing SCD1 protein level is accomplished by inhibiting the transcription of a SCD1 gene.
4. (Currently amended) The method of claim 3, wherein inhibiting the transcription of the SCD1 gene is accomplished by administering the [[an]] agent is selected from the group consisting of a thiazolidinedione compound and a polyunsaturated fatty acid to the subject.
5. (Original) The method of claim 4, wherein the thiazolidinedione compound is selected from the group consisting of BRL49653, Pioglitazone, Ciglitazone, Englitazone and Troglitazone.
6. (Original) The method of claim 4, wherein the polyunsaturated fatty acid is selected from the group consisting of dodecahexaenoic acid and arachidonic acid.

7. (Currently amended) The method of claim 2 [[1]], wherein the agent is SCD1 protein level is reduced by administering an antisense oligonucleotide for SCD1 ~~into the human or non-human subject.~~

8. (Currently amended) The method of claim 1, wherein the agent reduces reducing SCD1 activity is accomplished by inhibiting the enzymatic activity of SCD1.

9. (Currently amended) The method of claim 8, wherein the agent is SCD1 activity is inhibited by administering an SCD1 inhibitor ~~into the human or non-human subject.~~

10. (Currently amended) The method of claim 9, wherein the agent SCD1 inhibitor is an SCD1 antibody.

11. (Currently amended) The method of claim 8, wherein the agent the inhibitor inhibits the SCD protein by inhibiting a protein selected from the group consisting of a cytochrome b₅ protein, a NADH-cytochrome b₅ reductase protein, and a terminal cyanide-sensitive desaturase protein.

12. (Withdrawn) A method for identifying an agent that can increase insulin sensitivity in a human or non-human subject, the method comprising the steps of:

providing a preparation that contains SCD1 activity;
contacting the preparation with a test agent;
measuring SCD1 activity and comparing the activity to that of a control preparation that is not exposed to the test agent, wherein a lower than control activity indicates that the agent can increase insulin sensitivity in a human or non-human subject.

13. (Withdrawn) A method for identifying an agent that can increase insulin sensitivity in a human or non-human subject, the method comprising the steps of:
administering a test agent to the human or non-human subject; and